



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,104	10/29/2003	Michael Pollock	ECV-105-A	6606

7590 10/19/2005

Andrew R. Basile
Young & Basile, P.C.
Suite 624
3001 West Big Beaver Road
Troy, MI 48084

EXAMINER

THOMAS, LUCY M

ART UNIT	PAPER NUMBER
----------	--------------

2836

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/696,104

Applicant(s)

POLLOCK ET AL.

Examiner

Lucy Thomas

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/24/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/29/03, 4/26/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 6-8, 12-14 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman (US 6,088,210) in view of Kesselring et al. (US 2,838,634) and Gotisar (US 5,049,786). Goodman discloses an apparatus 10 (Figure 1, magnet protector) for protecting an energized inductive device, an industrial electromagnet from the effects of dissipating stored magnetic energy when supply voltage to the electromagnet is removed while the electromagnet is energized (open circuit), comprising: a diode D4, D5, D6, D9, D10 connected across terminals of the inductive device such that when the inductive device is normally energized, the diode is reverse biased. Goodman's apparatus differs from the claims by using a solid-state device including a trigger circuit, instead of a spark gap as recited in Claim 1 and a resistance as recited in Claims 2 and 7, in series with the diode, but he teaches prior art with spark gap surge arrester used for magnet protection (Column 2, lines 12-19). Kesselring et al. discloses a spark gap 40 in series with a diode 42 and resistance 43 (Figure 2, Column 4, lines 20-25, 33-38). Goodman also discloses a housing (Figure 5) for the magnet protector, however, fails to disclose a housing enclosing spark gap, filled with inert gas. Gotisar discloses spark gap tube 20 consists of electrodes 23, 24 located within a

Art Unit: 2836

housing 26, wherein the interior 28 of the housing 26 is a controlled environment of an inert gas (Figure2). It would have been obvious one of ordinary skill in the art at the time of invention to modify Goodman's apparatus with a spark gap and a resistor as taught by Kesselring et al. and a housing with a controlled environment of inert gas as taught by Gotisar as both are related to the protection of inductive devices from the effects of destructive voltages in case of an open circuit with spark gap known to have no leakage current and inert gas known to protect the spark gap from moisture and corrosion. With regard to Claim 6, Goodman discloses an apparatus wherein the inductive device is an electromagnet. With regard to Claims 3 and 8, magnet protector disclosed by Kesselring has a resistance comprised of at least one resistor 43.

Regarding method claims 12-14, 17-19, one would necessarily perform the recited method steps in the assembly of the apparatus rejected above.

3. Claims 4-5, 9-10, 11, 15-16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman (US 6,088,210) in view of Kesselring et al. (US 2,838,634) further in view of Czerlinski (US 4,520,249). Goodman fails to disclose a charge valve as recited in Claims 4, and 9, and a purge valve as recited in Claims 5 and 10, and an air pressure gauge as recited in Claim 11 for the spark gap housing. Czerlinski discloses a spark gap housing 10 with a charge valve 51 and purge valve 55, and an air pressure gauge 31. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the housing of Goodman with a charge valve, purge valve and air pressure gauge as taught by Czerlinski to maintain a controlled environment of inert gas in the housing to protect the apparatus from moisture and corrosion. Claims

15 and 20 recites a step of filling the spark gap housing with the inert gas using a charge valve extending into the housing. Claim 16 recites a step of extending a purge valve into the housing, the purge valve operable to allow at least one of venting and removal of the inert gas from the housing. Regarding these recited method steps, one would necessarily perform these steps in the assembly of the apparatus rejected above.

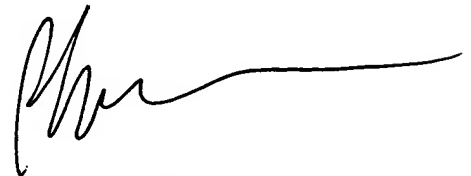
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lucy Thomas whose telephone number is 571-272-6002. The examiner can normally be reached on Monday - Friday 8:00 AM - 4:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 571-272-2058. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LT
September 26, 2005



PHUONG T. VU
PRIMARY EXAMINER